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NOTICE OF ALLOWANCE AND FEE(S) DUE

27820 7590 05/15/2009 WITHROW & TERRANOVA, P.L.L.C. 100 REGENCY FOREST DRIVE SUITE 160

CARY, NC 27518

EXAMINER

NGUYEN, DUSTIN

ART UNIT PAPER NUMBER

2454 DATE MAILED: 05/15/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/741,517	12/19/2003	Thomas O'Rourke	7000-645	4432				
TITLE OF INVENTION: COMPUTER TELEPHONE INTEGRATION OVER A NETWORK								

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/17/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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NGUYEN		2454		709-228000						
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DAT. less an assignee is ident h in 37 CFR 3.11. Comj	nge of Corresponder Indication for the decirity of the deciri	n istomer	(I) the names of up or agents OR, alterna (2) the name of a sin registered attorney or 2 registered patent at listed, no name will b THE PATENT (print or t data will appear on the CT a substitute for filing a (B) RESIDENCE: (CTI	ntive ngle i or age ttorn be pr type pate an as	ly, firm (having as a ent) and the name eys or agents. If n rinted.) ent. If an assigne signment.	membe s of up so name	er a 2		has been filed for
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NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not b tes Patent and T	e accepte rademark	d from anyone other than Office.	n the	applicant; a regis	tered a	ttorney or agent; or th	e assign	e or other party in
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WITHROW &	TERRANOVA, P.L.L	NGUYEN, DUSTIN					
	OREST DRIVE	ART UNIT	PAPER NUMBER				
SUITE 160 CARY, NC 2751	8		2454 DATE MAILED: 05/15/2009				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 823 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 823 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/741.517 O'ROURKE ET AL. Notice of Allowability Examiner Art Unit DUSTIN NGUYEN 2454 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 02/25/2009. The allowed claim(s) is/are 1-6, 8-18, 20, 23-27, now renumbered as 1-23. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. T Examiner's Statement of Reasons for Allowance of Biological Material

/DUSTIN NGUYEN/

Primary Examiner, Art Unit 2454

9.

☐ Other

05/11/2009

An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Applicants' attorney, Mr. John R. Witcher, on 05/06/2009.

Please amend the claims as follows:

1. (Currently amended) A method of providing an interface over a network between a client

computer and a server for controlling telephony equipment, comprising the steps of:

a) sending over the network to the client computer a first section of code including

software elements which when loaded in web browser software enable a user of the client

computer to issue commands to the server; and

b) formulating a second section of code as an open-ended stream of code which includes

event notifications generated dynamically by the server in response to said telephony equipment,

wherein at least some of the event notifications in the second section of code are adapted to

update in the browser software one or more software elements received in the first section of

code:-and

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c) sending over the network to the client computer said second section of code as a

trickled stream of data which is encoded to be progressively and incrementally loaded by said

web browser software; and

d) sending over the network a third section of code, said third section of code including a

web services description of web services available on said server which enable remote control of

the telephony equipment,

whereby the first section of code provides a browser-based interface suitable for

transmitting user generated events and events, the second section of code provides a mechanism

for updating the browser with notifications of events provided by the telephony equipment, and

whereby the software elements from the first section of code operate in conjunction with the web

services description from the third section of code to enable the generation of appropriate

commands to access the web services offered by the server, and thereby to control the telephony

equipment.

7. (Cancelled).

8. (Currently Amended) A method as claimed in claim-7_1, wherein the first and second sections

of code are transmitted as first and second frames in a web page, and the third section of code is

transmitted each time said web page is requested.

9. (Currently Amended) A method as claimed in claim-7 1, further comprising monitoring said

network for commands from the client to operate the web services.

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13. (Currently amended) A method of receiving an interface over a network from a server for controlling telephony equipment, comprising the steps of:

a) receiving over the network a first section of code including software elements which when loaded in web browser software enable a user of the browser software to issue commands to the server; and

b) receiving over the network a second section of code as an open-ended stream which includes event notifications generated dynamically by the server in response to said telephony equipment, wherein at least some of the event notifications in the second section of code are adapted to update in the browser software one or more software elements received in the first section of code, wherein said second section of code is received as a trickled stream of data which is encoded to be progressively and incrementally loaded by said web browser software; and

c) receiving over the network a third section of code, said third section of code including a web services description of web services available on said server which enable remote control of the telephony equipment,

whereby the first section of code provides a browser-based interface suitable for transmitting user generated events and events, the second section of code provides a mechanism for updating the browser with notifications of events provided by the telephony equipment, and whereby the software elements from the first section of code operate in conjunction with the web services description from the third section of code to enable the generation of appropriate

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commands to access the web services offered by the server, and thereby to control the telephony

equipment.

19. (Cancelled).

20. (Currently Amended) A method as claimed in claim +19 13, further comprising sending to the

server commands to operate the web services in response to user actions in the browser.

23. (Currently amended) Apparatus for providing an interface over a network between a client

computer and a server for controlling telephony equipment, comprising:

a) memory;

b) a) a first code generator for generating a first section of code including software

elements which when loaded in web browser software enable a user of the client computer to

issue communications control commands to the server;

b) c) a second code generator for generating a second section of code as an open-ended
 stream, said second code generator being in direct or indirect communication with said telephony

equipment and being configured to generate event notifications in response thereto, wherein at

least some of the event notifications in the second section of code are adapted to update in the

browser software one or more software elements received in the first section of code, said second

code generator being configured to transmit said second section of code as a trickled stream of

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data which is encoded to be progressively and incrementally loaded by said web browser software; and

d) a third code generator for generating a third section of code, said third section of code including a web services description of web services available on said server which enable remote control of the telephony equipment,

whereby the first section of code provides a browser-based interface suitable for transmitting user generated events and events, the second section of code provides a mechanism for updating the browser with notifications of events provided by the telephony equipment, and whereby the software elements from the first section of code operate in conjunction with the web services description from the third section of code to enable the generation of appropriate commands to access the web services offered by the server, and thereby to control the telephony equipment.

24. (Currently amended) A computer including a memory storing a web page, and a processor executing web browser software which displays said web page, wherein said web page comprises at least two frames, wherein one of said frames is a hidden frame generated as an open-ended stream of dynamically generated code encoded to be progressively and incrementally transmitted to said a client as a trickled stream of data in response to event notifications from a computer telephone integration application and the other of said frames is a visible frame adapted to be modified within a browser in response to particular events received in the open-ended stream of dynamically generated code and including web page elements enabling a user to issue commands to said computer telephone integration application, whereby

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the open-ended stream of dynamically generated code includes a section of code which includes a web services description of web services available to said user which enables remote control of the computer telephone integration application, whereby the open-ended stream of dynamically generated code operates to enable the generation of appropriate commands to access the web services available to said user, and thereby to control the computer telephone integration application.

25. (Currently amended) A computer network including a client and a server connected across the network, wherein:

the server comprises:

- a) a first code generator for generating a first section of code including software
 elements which when loaded in web browser software enable a user of the client computer to
 issue communications commands to the server; and
- b) a second code generator for generating a second section of code as an open-ended stream, said second code generator being in direct or indirect communication with said telephony equipment and being configured to generate event notifications in response thereto, wherein at least some of the event notifications in the second section of code are adapted to update in the browser software one or more software elements received in the first section of code, said second code generator being configured to transmit said second section of

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code as a trickled stream of data which is encoded to be progressively and incrementally loaded by said web browser software; and

c) a third code generator for generating a third section of code, said third section of code including a web services description of web services available on said server which enable remote control of the telephony equipment.

the client comprises:

a memory storing a web page, and a processor executing web browser software which displays said web page, wherein said web page comprises at least two frames, wherein one of said frames is a hidden frame generated from said second section of code, and the other of said frames is a visible frame generated from said first section of code,

whereby the first section of code provides a browser-based interface suitable for transmitting user generated events and events, the second section of code provides a mechanism for updating the browser with notifications of events provided by the telephony equipment, and whereby the software elements from the first section of code operate in conjunction with the web services description from the third section of code to enable the generation of appropriate commands to access the web services offered by the server, and thereby to control the telephony equipment.

26. (Currently amended) A computer program product comprising a computer readable computer storage medium encoded with instructions which, when executed on a server having control of telephony equipment, are effective to cause the server to:

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a) send over the network to the client computer a first section of code including software elements which when loaded in web browser software enable a user of the client computer to issue commands to the server: and

- b) formulate a second section of code as an open-ended stream which includes event notifications generated dynamically by the server in response to said telephony equipment, wherein at least some of the event notifications in the second section of code are adapted to update in the browser software one or more software elements received in the first section of code; and
- c) send over the network to the client computer said second section of code as a trickled stream of data which is encoded to be progressively and incrementally loaded by said web browser software; and
- d) send over the network to the client computer a third code generator which includes a web services description of web services available on said server which enable remote control of the telephony equipment.

whereby the first section of code provides a browser-based interface suitable for transmitting user generated events and events, the second section of code provides a mechanism for updating the browser with notifications of events provided by the telephony equipment, and whereby the software elements from the first section of code operate in conjunction with the web services description from the third section of code to enable the generation of appropriate commands to access the web services offered by the server, and thereby to control the telephony equipment.

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27. (Currently amended) A computer program product comprising a eomputer-readable computer storage medium encoded with instructions which, when executed on a computer connected to a network are effective to cause the computer to:

a) receive over the network a first section of code including software elements which when loaded in web browser software enable a user of the browser software to issue commands to the server; and

b) receive over the network a second section of code as an open-ended stream which includes event notifications generated dynamically by the server in response to said telephony equipment, wherein at least some of the event notifications in the second section of code are adapted to update in the browser software one or more software elements received in the first section of code, wherein said second section of code is received as a trickled stream of data which is encoded to be progressively and incrementally loaded by said web browser software; and

c) send over the network a third code generator which includes a web services description
of web services available on said server which enable remote control of the telephony
equipment,

whereby the first section of code provides a browser-based interface suitable for transmitting user generated events and events, the second section of code provides a mechanism for updating the browser with notifications of events provided by the telephony equipment, and whereby the software elements from the first section of code operate in conjunction with the web

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services description from the third section of code to enable the generation of appropriate commands to access the web services offered by the server, and thereby to control the telephony equipment.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUSTIN NGUYEN whose telephone number is (571)272-3971. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1519. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DUSTIN NGUYEN/ Primary Examiner, Art Unit 2454 Application/Control Number: 10/741,517 Page 12

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